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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,635

09/28/2006

Yoshiharu Ohta

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EXAMINER

ABU ALI, SHUANGYI

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

07/07/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,635	Applicant(s) OHTA ET AL.	
	Examiner SHUANGYI ABU ALI	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The previous rejection is withdrawn since the Examiner failed to point out that the figure of the prior art is based on the data test under different conditions than that of the instant applications. As such, the following new grounds of rejection has been instituted to clarify these issues.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 defines the slurry is subjected to a slake test with the operating condition such as shaking speed and shaking stroke. The Examiner will treat the slake test is carried out under the condition that the shaking speed is 310 spm and a shaking stroke of 40 mm.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-2, 4-5, 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2003-268354.

Regarding claims 1-2, 4-5, 7 and 10, JP'268 discloses a method of making a silica fume dispersion by adding a silica fume dispersion with a pH of 2-11 into a base to obtain stable silica fume dispersion has a concentration of 1-50% and a pH of about 8-12. JP'268 disclose silica particle diameter changes at a shaking speed is 300 spm and a shaking stroke of 40 mm. (claims 1-5, [[0007]-[0013] and Figure 1)

The reference differs from Applicant's recitations of claims by not disclosing identical ranges(concentration of 10-30% and ph of 12-14). However, the reference discloses "overlapping" ranges (concentration of 1-50% and PH of 8-12), and overlapping ranges have been held to establish prima facie obviousness (MPEP 2144.05).

Although JP'268 is silent about the increased rate of the fumed silica dispersion at a shaking speed is 310 spm and a shaking stroke of 40 mm, it disclose a similar slurry composition with overlapping range , the claimed increased rate of the fumed silica would be necessary followed from the teaching of JP'268.

Claims 3, 6, 8-9, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP2003-268354, further in view of U. S. Patent No. 7,211,122 to Iwasa.

Regarding claims 3, 6, 8-9, and 11 -12, JP'268 discloses a method of making a silica fume dispersion by adding a silica fume dispersion with a pH of 2-11 into a base to obtain stable silica fume dispersion has a concentration of 1-50% and a pH of about 8-12 set forth above, but JP'268 is silent about the average particle size of the fumed silica.

However, it would have been obvious to one of ordinary skill in the art at the time of invention by applicant to use fumed silica with a an average particle size as applicant set forth above, motivated by the fact that Iwasa, also dawn to using fumed silica in polishing, disclose that fumed silica with a average diameter of 10-150 has good polishing quality (col. 5, lines 9-20).

Response to Arguments

Applicant's arguments filed 04/12/2010 have been fully considered but they are not persuasive.

The applicant argues that the prior art's slurry does not has the increased rate of the fumed silica as applicant set forth in the instant application evidenced by the prior art's figure 1. The Examiner respectfully submits that the prior art's figure 1 is based on the data conducted at a shaking speed is 300 spm and a shaking stroke of

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40 mm, while the instant application's shaking test is conducted under the shaking speed is 310 spm and a shaking stroke of 40 mm. However, since the prior art disclose a similar slurry and if the slurry is tested under the same shaking test condition as applicant's slurry, the claimed increase rate of the fumed silica would be necessary followed from the teaching of prior art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHUANGYI ABU ALI whose telephone number is (571)272-6453. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Shuangyi Abu-Ali/

Examiner, Art Unit 1793

/J.A. LORENZO/

Supervisory Patent Examiner, Art Unit 1793